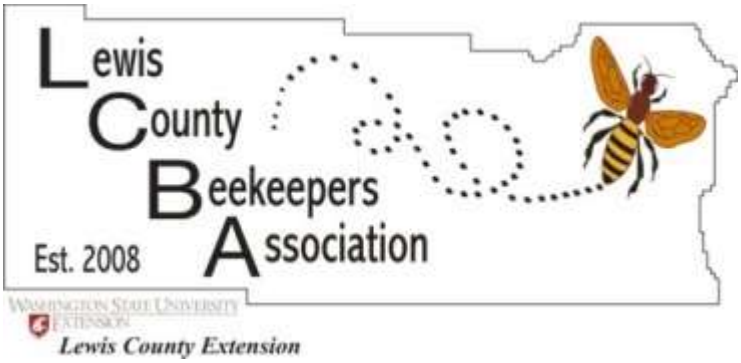

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August 2013 LCBA Newsletter

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Questions? Suggestions? Resources you'd like to share, stories you'd like to tell?

Please contact LCBA Secretary Susanne Weil: susanne.beekeeper@gmail.com or call 360 880 8130.

UPCOMING LCBA EVENTS:

August 10, 10 a.m. to noon: Workshop: Removing Honey Supers ~ Learn Techniques to Get Frames Without Harming Your Bees ~ Fume Boards, Blower Method, & Bee Escapes. Mentorship Coordinator Gary Stelzner will host this workshop at his apiary, 413 Tennessee, Winlock (for details and directions, email susanne.beekeeper@gmail.com or call 360 880 8130).

August 13-18: Southwest Washington Fair – please see article below for more information about brand-new LCBA honey bee outreach events, including our TWO honey judging contests! LCBA will have a booth in the Floral Building – if you'd like to help staff our table or have display items, please contact Susanne or Membership Coordinator Steve Howard (sfhoward45@msn.com). To see the Fair's webpage, visit http://southwestwashingtonfair.net/.

Special LCBA Fair Events:

Monday 8/12: Submit your honey for the official Fair Honey Judging Contest (see guidelines under "LCBA at the Southwest Washington Fair," below). Judging will take place on Tuesday morning and winning honey jars will be on display in the Floral Building.

Tuesday 8/13 (Kids' Day): 11 a.m. & 1:30 p.m.: For Kids - Bee Buzz - Who's Who in the Hive? (Sharette Giese)

Wednesday (Seniors' Day), 8/14: 11 a.m. "Getting Started in Beekeeping" (Peter Glover & Susanne Weil)

Thursday, 8/15: 4 p.m.: "Mason Bees: The Super Pollinator Story" (Kimo Thielges)

Saturday, 8/17: 11 a.m. "Getting Started in Beekeeping" (Peter Glover & Susanne Weil); 1 p.m.: "People's Choice Honey Judging," Master of Ceremonies, Norm Switzler

Sunday, 8/18 (Family Day): 11 a.m. For Kids - "Bee Buzz - Who's Who in the Hive?"

August 14: LCBA Monthly Meeting, 7 – 9 p.m., 103 Washington Hall, Centralia College

Social Time 6:30 to 7 – Come Talk Bees!

Topic: Testing Bees for Diseases & Parasites – featuring microscopic images live on the big screen… LCBA board members will demonstrate how to take testing samples, how to make slides, and then project them for all to see. VP Dave Gaston will report on July's Pacific Northwest Treatment-Free Beekeeping conference, and we'll have a discussion of the pros and cons of treatment(s).

Business Meeting: ***Beekeeping Q&A.*** **Also: monthly raffle –** ***if you have something to share, please bring it to the meeting !***

September 7, 10 a.m. to noon: Fall Management Issues Workshop in Winlock. Topics: What to look for in fall inspections, questions of reversing hive bodies, treatment issues, feeding questions, & more (for details and directions, email susanne.beekeeper@gmail.com or call 360 880 8130).

September 11: LCBA Monthly Meeting, 7 – 9 p.m., 103 Washington Hall, Centralia College

Social Time 6:30 to 7 – Come Talk Bees!

Topic: Fall Management Issues. Conducting fall inspections, removing/reversing hive boxes, treatment options, and more. Special feature: Tim Weible will demonstrate candy boards.

Business Meeting: Beekeeping Q&A. Also: monthly raffle.

September 14: Fall Management Issues Workshop II, 10 a.m. to noon – in Mossyrock or Randle – location TBA. See Sept. 7, above, for topic details.

September 28, 10 a.m. to 4 p.m.: Our Annual Honey-Spinning workshop: LCBA members will share extractors & equipment to help others get their honey (if you have equipment to share, please let Susanne know). Bring your supers ~ or just bring your curiosity! For details and directions, email susanne.beekeeper@gmail.com or call 360 880 8130.

September 29 – October 4, 2013: International Apimondia Congress, Kyiv, Ukraine. Representatives from over 35 countries will discuss the theme, ""Beyond the Hive: Beekeeping and Global Challenges." For registration and program information, visit: http://apimondia2013.org.ua/en/exhibition-program/become-a-delegate/

October 3 – 6, 2013: WSBA Conference, Federal Way, WA. Please note new dates & location – the conference was originally slated for Oct 31 - Nov 2 in Seaside, Oregon.

This year's WSBA conference focuses on take-home messages for beekeepers. Featured speakers include Les Crowder (*Top Bar Beekeeping*), Howland Blackiston (*Beekeeping for Dummies*), and Michael Bush (*The Practical Beekeeper*). Session topics include Rearing Your Own Queens, Natural Cycles of a Colony, Pesticides, Simple Steps to Healthier Bees, "Jeaporbee," and more.

For the complete schedule, visit: http://lewiscountybeekeepers.org/yahoo_site_admin/assets/docs/2013_WSBA_Conference_Agenda.195124506.pdf ; the schedule's also attached to this newsletter in a PDF file. Registration is $100 per individual, $200 per family; for registration details & a download-able form, visit: http://wasba.org/wp/wp-content/uploads/2013/07/2013-Washington-State-Beekeepers-Conference-Registration-Form.pdf.

To register online, visit: http://wasba.org/event/wsba-annual-conference-2013/

October 24, 31, Nov. 7, 14: LCBA / WSBA Apprentice Beekeeping Course, Lewis County Extension Classroom, Old Chehalis Courthouse; Cost: $30 individual; $45 couple or family.

LCBA Past President Bob Harris and President Norm Switzler will teach this introductory class, assisted by Peter Glover, Sheila Gray, and Susanne Weil. The course is sponsored by Lewis County Extension. The registration brochure is available on our website. Questions? Contact LCBA Secretary Susanne: susanne.beekeeper@gmail.com or 360 880 8130.

NOTES FROM LCBA'S July 13, 2013 SUMMER POTLUCK MEETING

Despite a busy weekend of Egg Days, STP bike racing, and other distractions, about 40 beekeepers gathered at our 5th annual summer potluck meeting, hosted once again by Bob and Sharon Harris at Rose of Sharon Farm. The weather was beautiful, giving folks a chance to explore the farm, meeting resident dogs, cats, cows, pigs, chickens, and, of course, bees, though after sampling all the pot luck dishes, people were feeling too mellow (not to mention too warm) to suit up and crack into hives. See the Photo Gallery link on our website for pictures!

Above, Michaela Phillips assists President Norm at our summer potluck raffle.

We had a short business meeting about our exhibit and honey judging contests at the upcoming Southwest Washington Fair (see below), then moved on to our raffle. This month's raffle benefited former member Wilma Sofranko's upcoming training for 350+ Kenyan beekeepers through her KiReeCo cooperative farming adventure – as these farmers raise bees, the honey they sell will help send their children to school, which is neither public nor free in their sector of the country. (For more details about KiReeCo, see our March newsletter.) Ably assisted by Michaela Phillips, President Norm Switzler raffled off bee escapes, LCBA mugs, Tomme Trikosko's beautiful hand-painted bee visors, home-brewed wine, and some yellow hazmat suits that, Norm reports, bees can't hang onto long enough to sting you….We raised $137 toward her goal of $352. Since the potluck, Wilma's reported that they are building their Langstroth hives and sent a photo of kids grinning ear to ear with their first constructions (see next page).

Above, KiReeCo beekeepers-in-training: Wilma reports, "The beekeeping Club at St. Theresa`s set up our first Langstroth Hive on Sunday- the kids learned to put wax foundation in the frames. A swarm moved in on Monday morning! They are so excited!"(Photo, Wilma Sofranko)

LCBA AT THE SOUTHWEST WASHINGTON FAIR, August 12-18

The Fair organizers are giving LCBA a prominent place in the Floral Building – they understand the critical importance of our favorite pollinators, and the Board is grateful for their support. We've planned quite a few special events, in addition to bee-fing up our educational exhibit with new materials (sorry about the pun . . . a little ;). Rob Jenkins has loaned his bumblebee hive (see below for more about that), Kimo Thielges is sharing mason bee materials, and Gary Stelzner is bringing hive parts. Dave Gaston is making a light box so that we can demonstrate the difference between raw and processed honey. We'll have new trifolds with photos of our mentor workshops, Bee Team removals, and an educational display about the challenges honey bees face today. The National Honey Board has donated recipe cards, brochures on bees and beekeeping for children, and more items for giveaways. Best of all, we will have the Observation Hive on display so that kids of all ages can play "find the queen."

Among our special events, Sharette Giese will lead children in "Bee Buzz ~ Who's Who in the Hive?" on Tuesday 8/13, Kids' Day, and on Sunday, 8/18, Family Day. Kimo is giving a mason bee overview on Thursday, 8/15. On Wednesday, 8/14, Senior Day, as well as Saturday, 8/17, Peter Glover and Susanne Weil will give an overview of how to get started in beekeeping. And, of course, we will have not just the regular fair honey judging contest, but our first-ever "People's Choice" Honey Tasting contest on Saturday, 8/17, 1 p.m. See below for honey contest

criteria and procedures. We're hoping that all these special events will help us get the word out about bees and beekeeping!

Please help us reach out to share knowledge and concern about bees with our Lewis County neighbors! If you are interested in helping staff our table, or if you have display items, please contact Susanne (see above) or Membership Coordinator Steve Howard (sfhoward45@msn.com). We are coordinating free admission tickets and parking passes for our volunteers.

Honey Contest #1 ~ Official SW WA Fair Contest Criteria:

Drawing on Bob Smith's presentation and questions raised in our monthly meeting discussion, and with help from Tim Giese and Roy Schaafsma, LCBA's board developed the following set of criteria by which the official honey judging at this year's Fair will run. Roy Schaafsma has graciously agreed to serve as judge for the Fair's official honey contest. *N.b.:* guidelines below apply only to the 2013 Southwest Washington Fair and may not be how other fairs conduct honey judging.

*** Color:** classified based on Jack's Scale. There are no points for color; color sets judging classes only, and judging takes place within each color class: for this competition, colors to be judged will be light, amber, and dark.

*** Moisture:** honey over 18.6% moisture is disqualified;

*** Flavor:** honey will be tasted only for scorched flavor that would indicate excessive heating.

*** Filtering:** micron filtering no less than 400. (Those who filtered their honey at LCBA's honey spinning last September will fit this category; if you have questions, please contact Susanne.)

*** Obvious crystallization will mean points off.**

***Please submit 2 jars:** 1 pint glass jars for official judging; optional, additional half pint for "People's Choice" tasting contest on Saturday, August 17 – details below. Tim. Gary, and Norm have donated jars – these are available at the Extension Office and will also be brought to our August 10 honey super removal workshop. If you can't get to either place but want jars, please contact Susanne.

Comb Honey: Roy will also judge the comb honey competition. Criteria for this category are less focused: the desideratum is clean, white, fresh comb without obvious tracking.

Honey Contest #2 ~ LCBA People's Choice Honey Tasting

Above, we asked contestants in the official Fair contest to submit 2 jars, one 1 pint, one half pint: that half pint will be for our People's Choice Honey Tasting Contest, 1 p.m. on Saturday, August 17. The samples will be set up for visitors to our exhibit to taste till the samples run out. The tasting will be prefaced by a short overview of how honey is made, spun,

and filtered, as well as some of the differences between commercial and raw honey. Tasters will be asked to focus on flavor, aroma, and texture. If you enter your honey in this contest, don't expect to get it back ;)

Once tasters have sampled, they will write the number of their preferred honey on a piece of paper and put it in a jar. Votes will be counted when the tasting is concluded, and the winner announced: the winner will be LCBA's first People's Choice Honey Tasting Champion. There will also be 2nd and 3rd place winners.

Since honey is a non-hazardous food, County health regulations permit us to have a honey tasting station at our exhibit, provided we have one-time-use tasters and a disposal jar. We will also have a hand cleaning station. To avoid that "woody flavor" affecting the tasting, we will use small plastic toothpicks.

Don't bee shy ~ enter your honey ~ go for bragging rights for your girls!

Above, Renzy Davenport and apian friends display a "bee beard" at WSU-WSBA Bee Field Days, June 14-15.

WSU – WSBA "Bee Field Days"

"Inside a Bee Beard" ~ by Renzy Davenport

Renzy was our September 2012 speaker on the topic of diagnosing and treating tracheal mite parasitism. Renzy, a self-described "bee nerd," belongs to four, count 'em, beekeeping associations, including ours, and serves as vice president of Olympia Beekeepers.

I recently attended the WSU Beekeeping short course with the thought of enhancing my knowledge and experience in what I affectionately call "my nerdy hobby." This particular day's events included identifying bee diseases and parasites in hives, a tour of the bee lab, queen rearing, hive manipulations, and as I faintly recalled, a bee beard demonstration. The class was divided into smaller groups that would proceed to different stations around campus on an hourly basis. When it came time for my group to head to the lab for a tour, I opted to stay outside. I had visited Erin O'Rourke's lab several times before while visiting my daughter during her 4 year stay at WSU and was by now very familiar with her dedication and the outstanding service she provides all beekeepers for the state of Washington. While outside, I wandered over to a gentleman standing next to what appeared to be a large swarm of bees on a post. Upon getting closer, I realized this was Tim Lawrence, (husband of Sue Cobey…developer of the New World Carniolan). As I approached, he asked if I was going to volunteer for to do the bee beard demonstration. My response was an immediate, 'HELL NO!!!' My younger days of living a little more recklessly have taught me a few things...or so I thought.

We chatted a few minutes as occasional classmates would slowly wander closer and get the same question from Tim: 'Do you want to try the bee beard?' Each person answered 'Noooo.' I began talking to a young guy hired to help in the Apiary who had been there about a month. His hands were swollen from a couple stings: he had been stung on the head the day before, and he still had the nervousness newbies have when around bees without a bee suit on. I told him how gentle honeybees usually are, as he ducked and dodged the occasional curious bee; I explained that you have to learn to notice the little things about them to know when they are a tad more testy. As proof of my bee prowess, I walked up close to the large cluster of bees on the pole as we chatted and assured him there was nothing to fear.

We joked around a bit and he asked me if I was going to do the bee beard. I laughed and again responded like the others..... 'Noooooooo!' When he asked why, I told him, 'I'm not that stupid.' His reply quickly included words I had recently used, almost taunting, about how gentle honey bees were. But it was the smirk on his face that made me feel the need to meet this challenge. I blurted out to Dr. Lawrence, 'Hey, I'll do the bee beard!' - then smirked back at the young man's challenge, giving him my best Clint Eastwood stare. Of course, his eyes lit up. Just then, I heard this loud voice in my head say: 'What the heck did I just do?' I still had to drive back home and didn't want to do that through swollen eyes.

Through my thoughts, I heard someone holler to get the rest of the class out here for the bee beard demo. Dr Lawrence asked me if I had been stung before, and if so, how many times. He also asked if I had any reactions to the stings. Still confused as to why I volunteered, I neglected to realize I could have had a way out, had I answered differently. Dr. Lawrence then asked me where I <u>didn't</u> want bees. I told him I didn't want them up my nose, in my eyes and ears, not in my mouth, nor, um…down below. His reply was, 'You're on your own down below,' then proceeded to rub the repellent OFF on most of the spots I mentioned. He ended with a quick 'what to do if you have a problem' briefing, then went to pull out a few queen cages from the center of the cluster on the post. He attached them to my shirt collar, under my chin, and promised, 'If you have any problems, raise your hands and we'll get you out of there.' He walked over to the post, pulled it out of the ground, gave it a resounding thump....and that's when the area was filled with what seemed like a gazillion bees.

I have been in the middle of swarms before, but they were always flying somewhere else. The buzzing seemed much louder than any swarm I had ever been in, and from where I stood,

things looked almost like a scene from a cheap horror movie. I have to admit I was a little nervous and thoughts of running towards my classmates to redirect the bee's attention briefly crossed my mind. In short order, the bees began to pick up the queen pheromones that guided them to me. They began coming towards me...by the hundreds, it seemed. Some bees came crashing in with reckless abandon. Some flew into my face; some landed and crawled across my face, eyes and nose. At times it tickled, but I knew I shouldn't move. The repellent worked, as none gathered around my nose, eyes, or mouth. I remember thinking, "this could be a big mistake if one gets a wild hair and decides to sting me." Would the others smell the pheromone and start stinging me too? Visions of Killer Bee deaths crossed my mind. But that feeling quickly disappeared as I felt the bees gathering on the front of my shirt and shoulders. I noticed them gathering on the brim of my ball cap and then beginning to hang down. It was making it hard to see my classmates without tilting my head back at times. I noticed classmates taking pictures and I tried to smile, but did not want to agitate the bees now clinging to my chin.

As I began to relax and feel more comfortable, I noticed how the bees' legs felt on my face as they began to cluster and cling. It felt like hundreds of tiny dull nails pressed gently against my skin. I could feel more and more warmth as they collected on my chest, shoulders, and face. I could see bees flying straight towards me and landing...sometimes right on my face. I went from initially feeling nervous to a feeling of amazement and wonderment. After 15 minutes, I noticed fewer bees in the air and felt the front of my shirt being pulled down. I realized it must be from the weight of the cluster. That's when it dawned on me....how the heck am I getting all these bees off me without getting stung!!!!!!!!

Dr. Lawrence approached me and said it was time to remove the bees because another student had now volunteered. He quickly went over again what I was supposed to do. In my head, I kept telling myself, 'He's a professional, he knows what he's doing, HOW THE HECK AM I GETTING ALL THESE OFF ME WITHOUT GETTING STUNG????' It was then I heard Dr. Lawrence counting, 'One...two...jump!'...and I did. The main cluster immediately fell at my feet and I backed away as instructed while two WSU apiary students used smokers and bee brushes to remove the rest. After a minute, I told them I felt a couple bees inside my shirt. One responded, 'Don't mash them': I had no intention of doing that! I pulled my shirt out and gave it a quick shake to release the bees, then heard them say, 'OK, you're good to go.' I looked at them and said, 'Are you sure?'

I gave myself a quick 'once-over' and headed towards the group, amazed at what I had just done and overjoyed that I had not had one bee sting me. I did notice a slight burning sensation on my face that I think was caused by the bees clinging to me. It was similar, but much milder, to what one might feel if you got some cologne on an area you had recently shaved. If you ever have a chance to try this do not pass it up….it was truly amazing!!!

Colony Removals – Update

Have you done a swarm or colony removal? ***Please let us know:*** So far, LCBA members have done at least 40 swarm and colony removals, and those are only the ones that Susanne knows about! Homeowners have been very appreciative; it seems that more and more people are aware that honey bees are facing hard times and wish to save them. LCBA's board is

keeping a log of removals in hope of applying for grant funding to help defray members' expenses. No promises – but we will try!

Reflections on Serving as a Bee Team Mentor and Leader
By Rob Jenkins

Rob Jenkins, one of LCBA's original members, has been doing removals for years and this year began sharing his expertise as one of our Bee Team mentors. Below are some of his reflections:

While I have done several removals over the past few years, this season is my first year as a mentor. I have really enjoyed the opportunity to share with others what I have learned over the years. I have done several removals this season and each one has been announced so that anyone has the opportunity to participate. The only exception was the bumble bee removal *[see below for Matt Taylor's account of the bumble bee caper]* - that was a special job that had to be limited. Thank you to Matt and Jen Taylor for their help on that one. All of the other removals have been well attended.

I have had the pleasure of having some of our youngest beekeepers participate (see photo, below). Some of these jobs were pretty simple and some were more complex. One thing for sure every one of them was a great learning experience for me and hopefully for those who attended. Every job I have done this season has provided the opportunity for others to take bees home. It makes me very happy to see so many new beekeepers interested in doing removals. I hope to continue to see this much interest in the future.

Above, Rob Jenkins looks on as Michaela and Terrie Phillips display comb cut from a colony in the wall of the Winlock Veterans of Foreign Wars building, May 2013.

"Mercilessly Cute Fuzzy Killing Machines"
By Matt Taylor

Matt and Jennifer Taylor are two of this year's new LCBA members. They've been active on Bee Team removals and now have four hives. Below, Matt's reflections on one of LCBA's more unusual removal experiences – a hive of orange-rumped bumblebees in an attic. Matt, Jen, and Rob tackled this one; the title, above, is Jen's comment on bumbles.

After our arrival at the home where our experimental bumble-bee adventure was to occur, we made the initial cursory inspection. Rob and I looked around the area where the bees were supposedly the most active. It was in the front corner of a garage that was set to be demolished to make room for a new one. At first, we didn't see or hear any signs of the bees, so we set up ladders and started tapping around the area above the overhead garage door with our trusty hammers. After a few minutes of disruption, the bees, one by one, began to emerge. Now with an idea of where they might be, we started peeling away the siding and diving in like we would a honey-bee rescue. We used a combination of standard flashlights and red lights.

When we peeled back enough siding and exposed the garage attic, I got into position for a closer look. I could hear the bees in the attic and it sounded like they were pretty close. A few were flying around outside, yet it was nothing like I've encountered in my honey-bee rescues. Realizing that a closer look was needed, I volunteered to climb into the attic and see what I could find. Meanwhile, Jen and Rob remained outside chatting with the homeowner and preparing to help me however they could from the safety of the garage exterior.

Fully suited, I entered the attic. It was like any other attic, a thin board offering only enough room to slowly crawl over the top of the insulation. It was dark and all I had was my head-lamp to light the way. I carefully made my way to the far corner of the attic where I had heard the bees from the outside. I could hear the bees quite clearly now, yet could only see a very small number of them buzzing about. I spent several minutes looking and listening but couldn't see where the rather loud buzzing was coming from. Finally, I thought to peel up some of the insulation as that is where I thought the sound was the loudest. I found a few more bees, yet still couldn't locate the source.

It was then that I felt my first bumble-bee sting. It is far sharper than any honey-bee and the burn lasted far longer. Unfortunately, that wasn't the last one I would feel that night. One after another stung clean through my suit, through my jeans and coat, until they hit their mark. I can only imagine the words that those outside heard as I stumbled backward hoping not to fall through the ceiling. As I fell back to the access door, I realized my mistake. Outside I had used my headlamp to search for the bees, but when I went into the attic, I forgot to change it over to the red light. The bees were agitated by the white light, so I switched to the red and returned to where I first was stung. The bees were noticeably calmer as I started peeling back more insulation. During the whole event I remember hearing voices outside but my focus was solely on the bees along with many painful stings.

As I pulled back more of the insulation from the moisture barrier, there it was: the nest. There were a few dozen bees surrounding what at first appeared to be a pile of dog or cat

leavings. Of course I never learn my lesson and leaned in for a closer look. The nest looked like large empty cells built on top of other cells, which were then built on more cells. At that point, the red light was not much help, as they began stinging again with renewed vigor. Not wanting to take any more hits, I quickly yet carefully reached down and peeled the nest away from the insulation.

With the nest in one hand and a brush in the other, I pushed the nest through the opening we had made to the outside, where Rob waited with a "nuc" box. Followed by a few sweeps of the brush, I sent as many bees into the box as I could before finally retreating. I was amazed at how the nest vibrated as I held it. It was stronger than the vibration on my phone for sure. As I fell back to a safer position, I realized the bees had made it into my hood. Moving as gingerly as possible, I made it back to the access door and removed my hood. I climbed down the ladder and rushed outside to get the bees out of my suit so that I could get it off of me. When I was finally clear and we had begun the clean-up, I was still feeling the stings but was happy with what we had accomplished.

Above, Matt Taylor inspecting one of his and Jennifer's hives without suiting up. Photo, Jen Taylor.

"Who will speak for dead bees?"
By Dewey Caron

Reprinted from the Portland Tribune, 26 July 2013

http://portlandtribune.com/ht/118-hillsboro-tribune-opinion/157702-who-will-speak-for-dead-bees

Dr. Dewey Caron retired after 42 years teaching entomology and beekeeping and is a volunteer affiliate professor in Oregon State University's horticulture department. He lives in Tigard and keeps five colonies of bees. For more on the Wilsonville story, see the August edition of Bee Culture, as well as the "Bees in the News" link on LCBA's website.

Dead bumblebees found under flowering European linden trees in Wilsonville and Hillsboro should spark action.

The dead bees in Wilsonville were apparent victims — following Oregon Department of Agriculture (ODA) analysis of dead and dying bees, and tree flowers and foliage — of an illegal application of a neonicotinoid pesticide.

Besides taking the unusual step to protectively wrap the 55 linden trees in Wilsonville and one tree in Hillsboro to exclude further insect visitation, the ODA enacted a temporary six-month ban on the use of 18 pesticides with the neonicotinoid dinotefuran on ornamentals.

Although unlikely to seek regulatory activities against homeowners, the ODA made it clear that licensed pesticide applicators "would be violating Oregon regulations if they use dinotefuran in the next 180 days."

We may never know whether there is a direct link between the massacre of more than 50,000 bumblebees in Wilsonville due to careless use of a pesticide known to be "highly toxic to bees" and to the loss of bumblebees in Hillsboro.

A common dominator, however, is the pesticide dinotefuran (trade name "Safari"). In Wilsonville, 55 parking lot trees were sprayed while in full bloom. The spray application designed to eliminate honeydew-secreting aphids was presumably conducted due to customer complaints of honeydew on car windshields.

The same pesticide was sprayed on the trunk and roots of 200 Hillsboro linden trees in March, which was not a violation of the label.

ODA analysis of Hillsboro bees and trees is forthcoming. Were the dead Hillsboro bumblebees another "unintended consequence" of pesticide use? Were bumblebees once again non-target victims?

We need to educate ourselves about pollination's role in our lives and what consequence pesticides might play in normal functioning ecosystems. We should resolve to never apply a pesticide to trees or flowering plants as we run the risk of harming necessary pollinators. But

Hillsboro may also demonstrate that we should carefully evaluate use of pesticides and whether what we hope to accomplish by use of such chemicals is really in our own best interest.

The neonicotinoid pesticides, the most widely used insecticide in the urban environment, are long-lasting compounds that have been implicated in the global decline of honeybees. In Wilsonville, the magnitude of the bee massacre demonstrates the critical nature of human reliance upon pesticides and their fearful potential to kill beneficial insects.

Consider that one-third of foods we consume are dependent upon insect pollinators. Of 100 crops providing 90 percent of the world's food, 71 are pollinated by bees.

Neonicotinoid insecticides, with active ingredients like imidacloprid, dinotefuran, thiamethoxam, and clothianidin, can be purchased in most hardware stores and nurseries under various trade names. Stores that sell pesticides or treated materials should be required to post more prominent information on their potential to harm pollinating insects. When buying plants or gardening, avoid materials treated by nursery and retail stores with neonicotinoids. Ask — and if they can't tell, shop elsewhere.

Scientists at Xerces Society, Portland's world renowned center of excellence on conservation of insects and other invertebrates, are calling on Hillsboro and county authorities to consider banning the cosmetic use of insecticides on city- and county-owned lands, and the federal Environmental Protection Agency should step up its review and seek to determine what role pesticides may play in bee deaths.

Who will speak for the dead bumblebees beneath the lindens? How many more times will this occur before we decide to speak out?

Above, Wilsonville dead bumblebees collected for ODA analysis ~ photo, King 5 News.

BEES IN THE NEWS

Many thanks to Maggie Keeling, Steve Norton, Gillian Davis, and more for sending news about our favorite members of the Genus apis ~ please keep 'em coming!

H.R. 2692: The Save America's Pollinators Act of 2013

Congressman Earl Blumenauer, Third District of Oregon, has introduced H.R. 2692 in the U.S. House of Representatives in response to the bumblebee deaths in Wilsonville, Oregon earlier this summer, as well as recent research on the immediate and sub-lethal effects of neonicotinoid pesticides. H.R. 2692 would "direct[ ] the Environmental Protection Agency to suspend use of the most bee-toxic neonicotinoids for use in seed treatment, soil application, or foliar treatment on bee attractive plants within 180 days, and to review these neonicotinoids and make a new determination about their proper application and safe use. EPA is required to take all peer reviewed data into account when reviewing the use of these neonicotinoids, and to specifically account for any potential impact on the health and viability of pollinator populations." Most neonicotinoids are not slated for further EPA review until 2018.

The Congressman's information brief notes that "Save America's Pollinators Act also instructs the Secretary of the Interior, in cooperation with the Environmental Protection Agency Administrator, to issue a report on the native bee populations in the United States, any decline in the population levels, and any potential causes of such decline."

Congressman Blumenauer comments that "[g]iven the recent bee dieoffs in Hillsboro, Oregon and Wilsonville, Oregon and disturbing preliminary research on the impact of these pesticides, they must be evaluated to ensure that their use does not pose an immediate threat to bee populations and the long-term viability of our farms. Until those determinations are made, we cannot risk the potential of putting our farms, food, and families in danger."

H.R. 2692 is supported by the Center for Food Safety, Xerces Society, NW Center for Alternatives to Pesticides, and other groups. CREDO Action has an online petition that those so moved can sign and send to representatives. CREDO's petition can be accessed at: http://org.credoaction.com/petitions/tell-congress-stop-the-pesticide-that-is-killing-bees. To read the complete summary of H.R. 2692, visit: http://blumenauer.house.gov/images/stories/2013/Save_Americas_Pollinators_One_Pager.pdf

Crop Pollination Exposes Honey Bees to Pesticides, Which Alters Their Susceptibility to the Gut Pathogen Nosema ceranae

On July 24, Jeffrey S. Pettis, Dennis vanEngelsdorp, and colleagues published a study showing how interactions between fungicides and pesticides weaken honey bees, making them less able to resist Nosema ceranae. The study explored how "field-relevant combinations and loads of pesticides affect bee health." Researchers gathered pollen from bee colonies in seven major crops –almond, apple, blueberry, cranberry, cucumber, pumpkin, and watermelon – and studied the three strongest foraging hives in three fields of each crop. They then inserted pollen

traps to sample from what crops bees were bringing back pollen and study the levels of pesticide and fungicide loads in that pollen.

Three major results have implications for beekeeping. First, just because honey bees were placed in a field of target crops didn't mean they pollinated those crops. Often, they didn't bring back any pollen from target crops, preferring weeds and wildflowers. However, the pollen they brought back still contained significant loads of pesticides and fungicides used on the target crops: therefore, beekeepers are urged to look not only at what is sprayed on crops to which they bring their bees, but also drift onto adjacent fields. The two target plants that honey bees did consistently pollinate were almonds and apples: the researchers commented that these are two plants that co-evolved with honey bees as their natural pollinators in the Old World, whereas crops native to the Americas made up a very small portion of the pollen trapped in this study's samples. The study focused on pollen collected from bees' corbiculae in traps, not nectar, though, so the bees could have come in contact with pesticides from target crops even when pollen from those crops didn't show up in samples.

Second, fungicide showed up "at high levels" in both target and non-target plants. Two fungicides in particular, chlorothalonil and pyraclostrobin, and two miticides used against Varroa mites, amitraz and fluvalinate, had a significant impact on the bees' resistance to infection by parasites. These fungicides also significantly increased bees' susceptibility to Nosema: bees that consumed these fungicides were "more than twice as likely" to show Nosema infection than bees that hadn't. A similar rate of susceptibility to Nosema appeared in bees who came in contact with the miticides, suggesting the importance of rotating old comb out of hives to minimize danger to bees and resistance by mites.

Last, this study is the first to document the impact of "real world pollen-pesticide blends" on honey bees. Even pollen from non-target plants was contaminated: 35 pesticides were found, including several whose concentrations were "higher than their median lethal dose." 22 of the 35 pesticides were associated with a significantly higher than normal risk of Nosema infection in the bees. Also, though neonicotinoids only entered the sample bees' colonies via pollen from apples, the interactions between fungicides and these pesticides caused problems. Also, when bees are exposed to multiple pesticides, the amount of each required to be a lethal dose drops; multiple exposure also increases queen supersedure. The researchers also noted the pesticides' "sub-lethal effects on development, reproduction, learning and memory, and foraging behavior."

To read the original study [PLoS ONE 8(7): 24 July 2013], visit:
http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0070182#authcontrib

Native bee species spotted for first time since '90s (14 July 2013, Seattle Times)

The Western bumblebee (Bombus occidentalis), distinctive because of its "white butt," has reappeared after many feared it was extinct in Washington. Photographer and "self-described bee nerd" Will Peterman scored pictures of the rare bee in a park in Brier, northeast of Seattle, as it foraged among blackberries. The following weekend, U. Washington biologists went back with him and found a lone queen. A Brier resident was the first in over ten years to see one in a garden last summer; they came back to her garden this year.

Once very common in western states, the Western bumblebee started to disappear in the 1990s. Why they began dying out is unknown, though the drop in their numbers took place as commercial bumblebee breeding programs began to rise. Scientists hope that this sighting may be the beginning of "a comeback" and hope that these bumbles may have resistance to "whatever it is that knocked them back in the first place," Peterman noted.

At U.C. Davis, scientists suspect that bumblebees shipped to European countries may have picked up Nosema bombi, a gut parasite like the Nosema ceranae that plagues the honey bee, with the result that when infective queens were imported back to the Americas, they exposed native populations without any immunities, causing a population crash. The Xerces Society plans to work with residents to "create habitat" for the now-rare bumbles, part of their "citizen science project" engaging bee enthusiasts in tracking bumblebee numbers.

Below, Will Peterman's photo, Seattle Times. To read more, visit:
http://seattletimes.nwsource.com/html/localnews/2021395297_bumblebeesxml.html

Unraveling the Pollinating Secrets of a Bee's Buzz (11 July 2013, The New York Times)

Bumblebees are "buzz pollinators": they deploy their buzz literally to vibrate pollen right out of a flower. Fertilization, to a bumble, is just a side effect of dinner. Scientists have been investigating how buzz pollination got its start, and why some plants evolved to depend on it rather than wind or more direct insect pollination. It's more usual for plants to secrete nectar that attracts pollinators, who then pick up pollen and leave it behind, fertilizing other individual plants. Cranberries, tomatoes, potatoes, and some 20,000 others have only pollen to attract pollinators. Fortunately for these plants, bumblebees and other pollinators that need pollen will

seize the flower "with its jaws and start [ ] vibrating hundreds of times a second," thus accessing the pollen "tucked deep inside."

The bees vibrate flowers so strongly that they must hold on to avoid being flung off. Bees make a striking sound as they buzz: "like a bee is giving you a raspberry," says Stephen Buchmann, University of Arizona project scientist. Buchmann commented that "bees are turning themselves into living tuning forks" to release pollen, which gets enough momentum to "blast out in a cloud that coats the bee." Though the bees' goal is to feed their larvae back at the nest, the resulting mess means that excess pollen sticking to the bees' hairs can still fertilize plants.

Many questions remain – how plants evolved this mechanism for fertilization, and why honey bees can't buzz-pollinate, though bumbles can. Since bumblebees are declining like honey bees and other pollinators, scientists want to learn more. "'We could live just on wind-pollinated plants like wheat and barley and millet," said Dr. Buchmann, wearily listing each food, "but it would be a pretty bland, nasty diet.'"

To read more, visit: http://www.nytimes.com/2013/07/11/science/unraveling-the-pollinating-secrets-of-a-bees-buzz.html?emc=eta1&_r=0

Israeli Pesticide Company That Fights Pests With Bumble Bees Now Launches In India (13 June 2013, Jerusalem Post)

In Israel, a company called Bio-Bee is working to reduce agriculture's dependence on chemicals, fighting pests via "biologically-based integrated pest management." Bio-Bee carries out "mass harvesting" of "beneficial insects" that serve as natural enemies to problem pests. Their goal: to create "a balance between the pest population and their natural enemies." For example, they deploy fruit flies in what they call the "Sterile Insect Technique": they saturate target crops with sterile male fruit flies, who then mate with fertile females, resulting in "gradual long-term control" through population loss. If this process works, it could lead to substantially less chemical contamination in food crops, as well as healthier environmental conditions for pollinators.

Bio-Bee has taken their integrated pest management project to India, where farmers have trouble exporting produce to European or American markets that require low chemical residues. Bio-Bee agronomists are now working with farmers in Maharashtra and Karnataka to help them reduce dependence on heavy chemical interventions. Bio-Bee spokesmen say that in Israel, 90% of pepper plants and 80% of strawberry fields now use IPM, and that the approach has benefited growers of tomatoes, cucumber and eggplants, where the IPM approach focuses on bumblebees.

To read more, visit: http://nocamels.com/2013/06/israeli-pesticide-company-that-fights-pests-with-bumble-bees-now-launches-in-india/?fb_ref=above-post&fb_source=email

Sea-Tac Airport Installs Honeybee Hives: Port Capitalizes on Open Space to Increase the Hardiness of NW Bees (5 June 2013, SEATAC website)

A new project called "Flight Path" has brought 500,000 honey bees to SEATAC. The Port of Seattle and the nonprofit The Common Acre have joined forces, managing six hives on undeveloped sites that serve as safety buffers for runways. SEATAC is reportedly one of the

first airports in the nation to open its space to bees: Chicago's O'Hare led the way in 2011, following the example of German airports in the late 1990s. The partners hope to improve genetic diversity, thanks to foraging habitat that they hope will attract feral bees: since 2007, almost 150,000 new plantings have been started in the airport's wetland mitigation sites. The project also seeks to raise survivor queens, helping create a stronger breeding stock for western Washington bee colonies.

Why bees? Airport officials comment that "The parallels between the aviation industry and bees are illuminating. Air traffic controllers at Sea-Tac direct an average of 850 planes each day, transporting 33 million people and 283,500 metric tons of cargo a year. Honeybees also rely on efficient operations, each hive logging up to 200,000 flights a day and requiring visits to two million flower blossoms to generate one pound of honey. Like planes, bees have wings, fuselages and landing gear. They use terminals, runways, and complex navigation and communication systems. Bees transport cargo from a hub to the home port. These pollinators consume fuel for their journey, and gather resources at both ends of their trip." In January 2014, SEATAC will open a showcase of bee art and educational exhibits on concourse B, featuring local artists. The 2013 conservation budget is $500.

To read more, visit: http://www.portseattle.org/Newsroom/News-Releases/Pages/default.aspx?year=2013#378. To see a video covering the project, visit: http://link.videoplatform.limelight.com/media/?channelId=8244840a41db4285969f0e816c6c5480&width=480&height=321&playerForm=Player&deepLink=true

ANNOUNCEMENTS

See Upcoming Events, above, for August & September Mentor Workshops & our October ~ November Apprentice Beekeeping class.

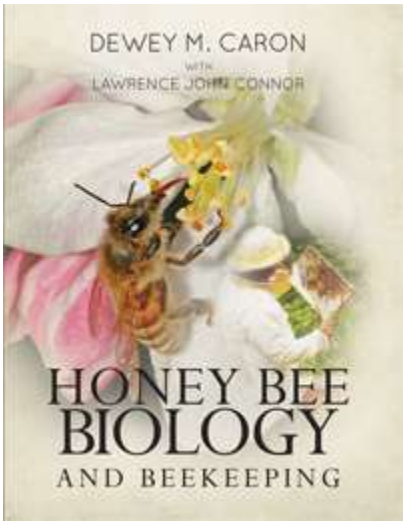
October WSBA Conference Update: See Upcoming Events, above, for information about schedule & registration ~ this year's focus is take-home messages for beekeepers.

Need a Queen? LCBA VP Dave Gaston, now a two-time graduate of the Silverdale queen rearing class and winner of its Cloke Board prize, is raising queens from both local survivor stock and the WSU Caucasian queens who arrived in July. With help from Norm Switzler, Jon Wade, and Steve Howard, Dave grafted 16 larvae on the 25th of July: if all goes well, they should be hatching out around the 10th of August. For this test batch, Dave is asking $15 for virgin queens or queen cells; for mated queens, $30. The price is to help cover cost of equipment. If you are interested in buying one of these queens, please contact Dave at fauxelk@hotmail.com.

Want Bees? Rich Harned is looking to cut back his bee yard from six to two hives – he's seeking a good home and a fair price for four colonies, boxes, bees, and all. These hives range from a year old to splits and swarms from this spring. Rich adds, "They are my kids and I want the best for them. I have strong hives with no chemicals added, all organic treatments." If you're interested, contact Rich at 2manyfish@lewiscounty.com or call 520 0388.

Kids' Page for LCBA Website – coming this summer: Susanne is searching for age-appropriate videos, websites, texts, and of course illustrations to help children learn more about honey bees. If you know any great resources for children interested in bees, please let her know!

A New Resource: Honey Bee Biology and Beekeeping ~ Expanded & Updated New Edition: **Dr. Dewey Caron**, our May LCBA speaker, has updated and expanded *Honey Bee Biology and Beekeeping.* This new edition is co-authored with Larry Connor, has impressive color pictures, and will soon be available from Wicwas Press. If you'd like to get it sooner, you can contact Dewey at carond@hort.oregonstate.edu or phone 302 353-9914 and include a mailing address: cost is $55 (FYI, he can't take credit cards, just check or cash.) It will soon be stocked by bee supply dealers, including Ruhl Bees in Gladstone, OR. *(See cover illustration, below.)*



Above, cover of Dewey Caron's new edition of Honey Bee Biology and Beekeeping, co-authored with Larry Connor.

August Western Apicultural Society Newsletter: Coming soon! Visit http://groups.ucanr.org/WAS/WAS_Journal and click on the line in the paragraph on the right as directed. If you're still getting the old issue, click on "empty cache" in your browser or "refresh" or "reload" under VIEW in your menu bar.

August WSBA Newsletter: Soon you'll be able to pick up your copy from the main page, www.wasba.org: click on "Newsletters" under OUR SPONSORS on the lower right of the page. Then click "Current issue.

That's it for this month. Take care & bee happy!

~~ Susanne Weil, LCBA Secretary (Susanne.beekeeper@gmail.com; 360 880 8130)